REPLACEMENT POWERHEAD SEAL KIT, P/N 5008304, INSTALLATION INSTRUCTIONS

APPLICATION

This kit is used for ***Evinrude E-TEC* 3.3 liter 90°V6** models. Later model outboards do not require all components supplied. Older models must be updated with Rear Oil Manifold Kit, P/N 5008084.

SAFETY INFORMATION

The following symbols and/or signal words may be used in this document:

⚠ DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate personal injury.

NOTICE **Indicates an instruction which, if not followed, could severely damage engine components or other property.**

These safety alert signal words mean:

ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

For safety reasons, this kit must be installed by an authorized *Evinrude*®/*Johnson*® dealer. This instruction sheet is not a substitute for work experience. Additional helpful information may be found in other service literature.

DO NOT perform any work until you have read and understood these instructions completely.

Torque wrench tightening specifications must strictly be adhered to.

Should removal of any locking fastener (lock tabs, locknuts, or patch screws) be required, always replace with a new one.

When replacement parts are required, use *Evinrude/Johnson Genuine Parts* or parts with equivalent characteristics, including type, strength and material. Use of substandard parts could result in injury or product malfunction.

Always wear EYE PROTECTION AND APPROPRIATE GLOVES when using power tools.

Unless otherwise specified, engine must be OFF when performing this work.

Always be aware of parts that can move, such as flywheels, propellers, etc.

Some components may be HOT. Always wait for engine to cool down before performing work.

If you use procedures or service tools that are not recommended in this instruction sheet, YOU ALONE must decide if your actions might injure people or damage the outboard.

This document may be translated into other languages. In the event of any discrepancy, the English version shall prevail.

TO THE INSTALLER: Give this sheet and the operating instructions to the owner. Advise the owner of any special operation or maintenance information contained in the instructions.

TO THE OWNER: Save these instructions in your owner's kit. This sheet contains information important for the use and maintenance of your engine.

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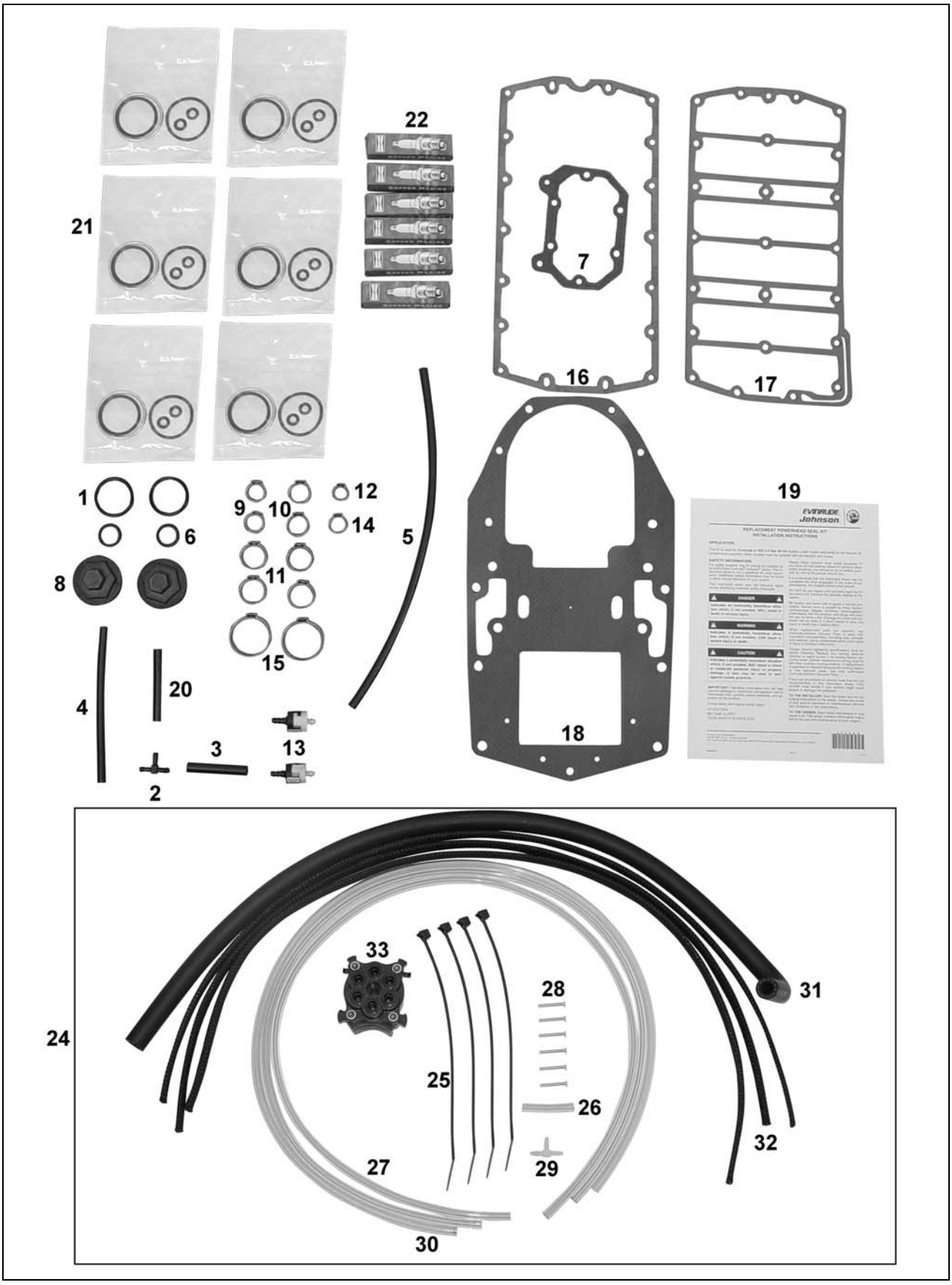
REPLACEMENT POWERHEAD SEAL KIT



REPLACEMENT POWERHEAD SEAL KIT

Ref	P/N	Name of Part	Qty
–	5008304	SEAL KIT	1
1	301917	*O-RING	2
2	313537	*FITTING,TEE 5/32" OD (Black)	1
3	772571	*HOSE, 2.5" cut from roll 5/32 ID" (.140/332721)	1
4	772569	*HOSE, 6.5" cut from roll 3/32 ID" (.093/335803)	1
5	772569	*HOSE, 15" cut from roll 3/32 ID" (.109/338591)	1
6	339299	*SEAL,THERMOSTAT	2
7	344472	*GASKET REG/RECT	1
8	344771	*COVER,THERMOSTAT	2
9	346150	*CLAMP,EAR-18.5MM	2
10	346151	*CLAMP,EAR-21MM	2
11	346152	*CLAMP,EAR-25.6MM	4
12	346785	*CLAMP,EAR-14.5MM	1
13	348478	*VALVE, CHECK	2
14	348839	*CLAMP,EAR-17.0MM	1
15	349729	*CLAMP,EAR-41.0MM	2
16	350933	*GASKET THROTTLE BODY to REED PLATE	1
17	350934	*GASKET REED PLATE to CRANKCASE	1
18	351535	*GASKET CRANKCASE to ADAPTOR	1
19	355442	*SHEET,INSTRUCTION	1
20	352941	*HOSE, 3" x 7/64 ID" (.109)	1
21	5007017	*KIT AY,INJECTOR	6
23	5007597	*SPARK PLUG AY, QC8WEP	6
24	5008084	REAR OIL MANIFOLD KIT	1
25	320107	*TIE STRAP, 7"	4
26	345359	*HOSE, 1.5" BLUE TUBING	1
27	348513	*HOSE, 32" BLUE TUBING	2
28	349898	*HOSE SUPPORT, brass	6
29	352336	*FITTING,TEE 1/8" OD (White)	1
30	354118	*OIL SUPPLY HOSE, 39" CLEAR TUBING	1
31	353233	*HOSE Fuel supply hose	1
32	600905	*SLEEVE,BRAIDED 3/16" 28 " length	3
33	5007639	*MANIFOLD AY,OIL	1

Refer to **HOSE ROUTINGS** on the next pages and in the appropriate *Evinrude E-TEC* service manuals as needed for additional assembly information.

This kit includes components to update older models to sleeve oiling.

IMPORTANT: The oil supply hose (clear tubing) to the rear oil manifold must be installed in the center fitting of the oil injection pump. This hose DOES NOT use brass supports.

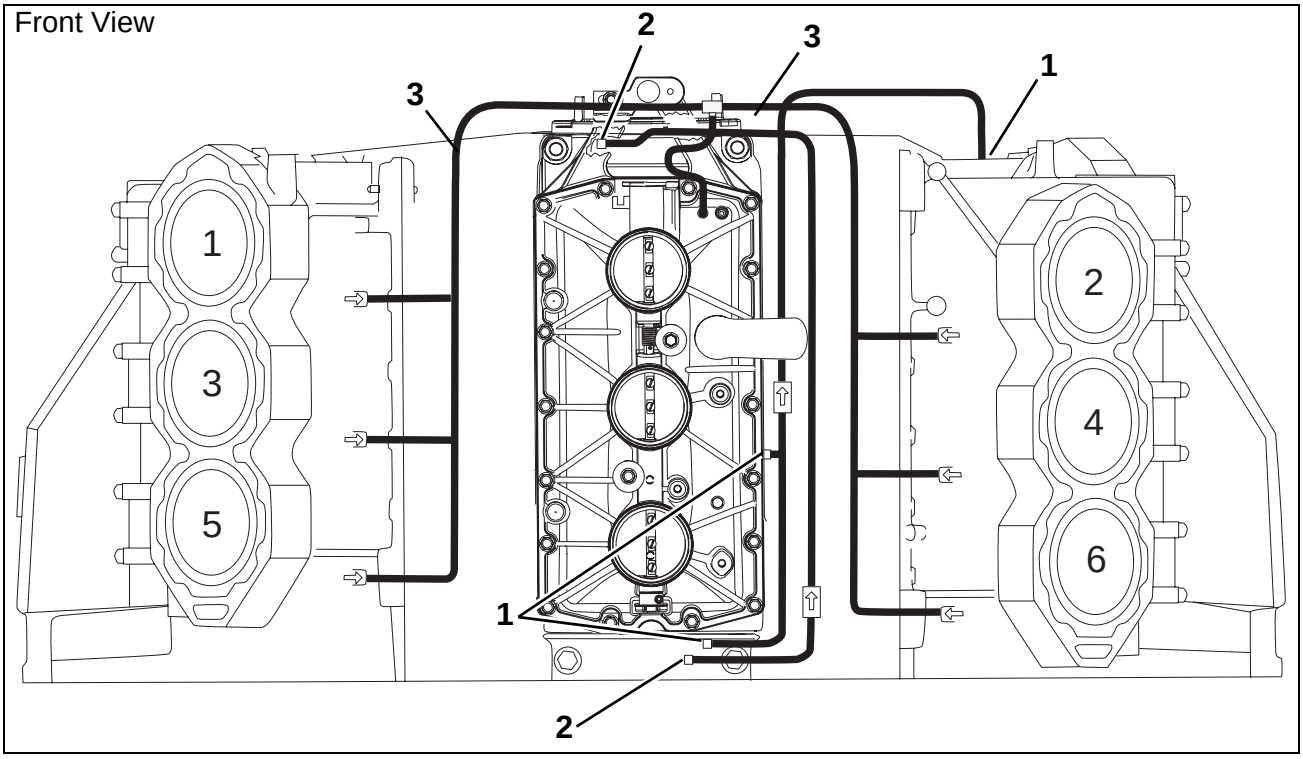
The rear oil distribution hoses (blue tubing) can be installed in any of the rear manifold fittings.

NOTICE **Position fuel and oil hoses to prevent hoses from being pinched during assembly. Pinched or damaged hoses can restrict fuel or oil flow and result in powerhead failure**

Perform the following procedures when installing replacement powerheads:

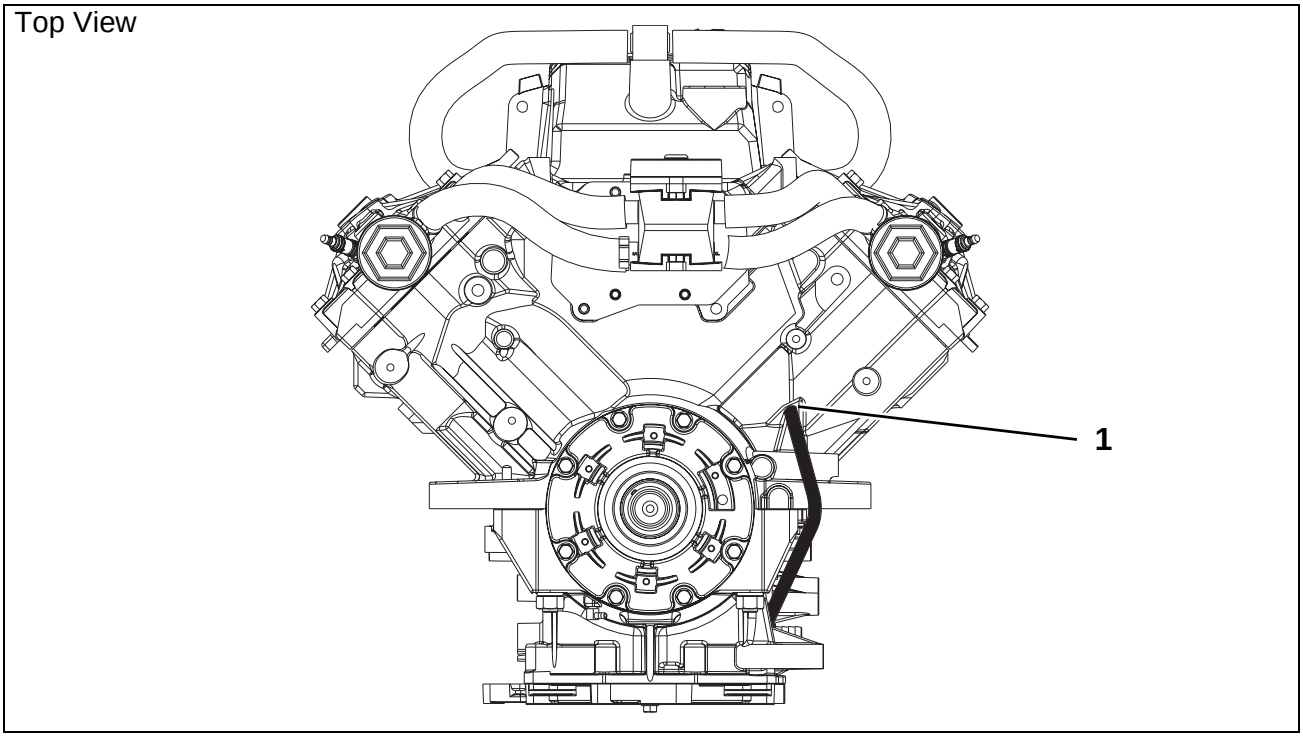
- Adjust timing pointer. Refer to “Timing Adjustments” in the service manual.
- Index all spark plugs. Refer to “Spark Plug Indexing” in the service manual.
- Use *Evinrude Diagnostics* software to start powerhead break-in oiling. Refer to “Powerhead Break-In” in the service manual.
- Use *Evinrude Diagnostics* software to set TPS calibration. Refer to “TPS Calibration in the service manual.
- Use *Evinrude Diagnostics* software to make sure engine management software version and revision are current. Update as required.
- Prime fuel system. Refer to “Fuel System Priming” in the service manual.
- Prime oiling system. Refer to Refer to “Oil System Priming” in the service manual.
- Use *Evinrude Diagnostics* software to check engine timing. Refer to “Timing Adjustments” in the service manual.
- Run outboard and check for water, fuel, or oil leaks.
- Make sure engine reaches correct operating temperature and does not overheat.

OIL RECIRCULATION HOSE ROUTINGS



Recirculation Hose Routing – Front 008205

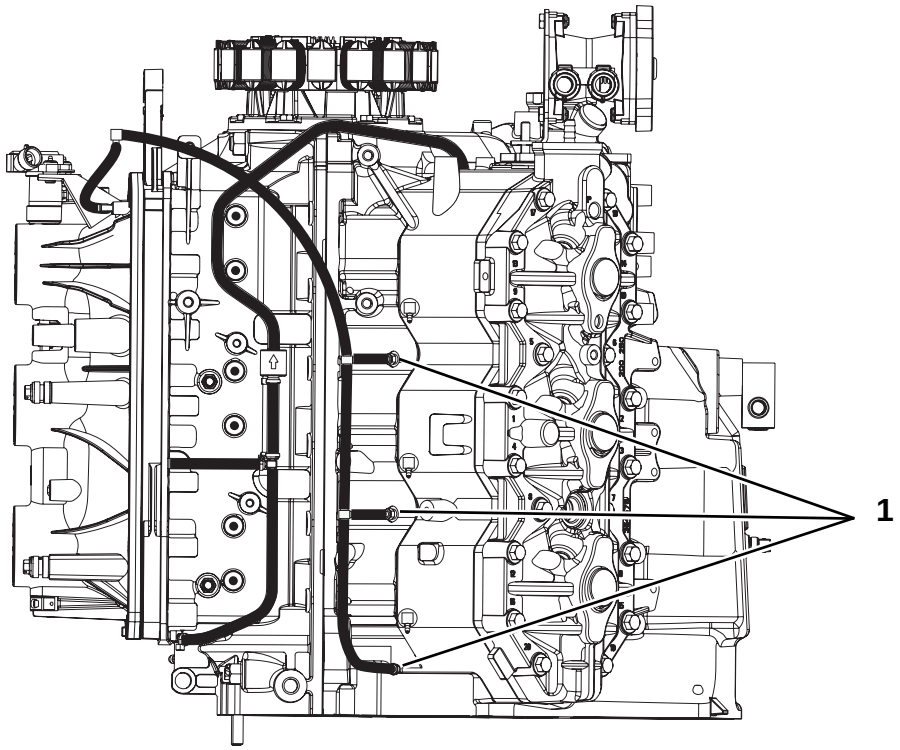
1. *Intake manifold to cylinder #2 recirculation fitting*
2. *Lower to upper main bearing recirculation fitting*
3. *Cylinder recirculation to intake manifold fitting*



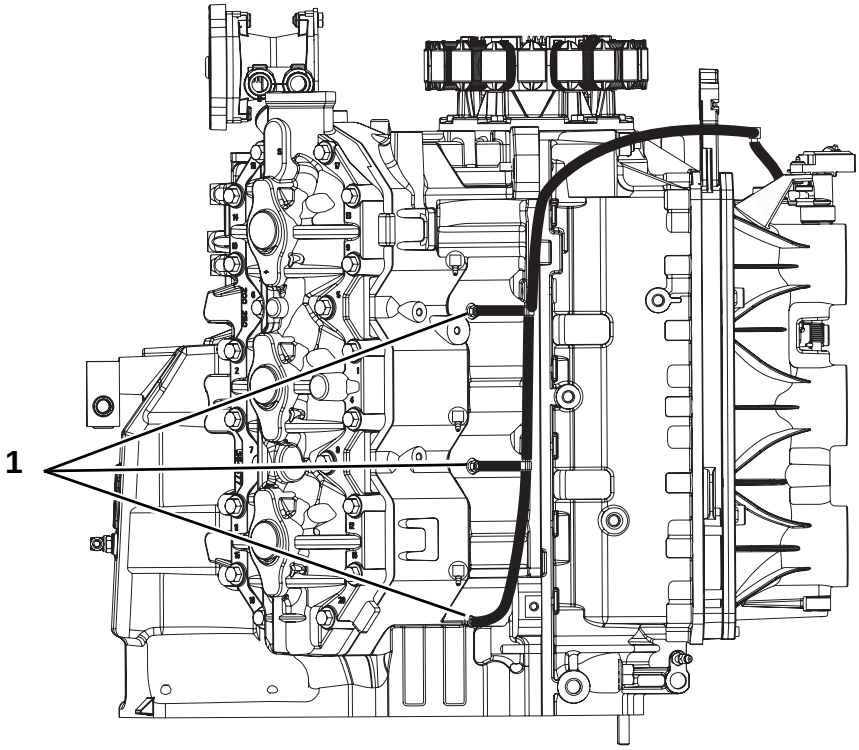
Recirculation Hose Routing – Top 008206

1. *Intake manifold to cylinder #2 recirculation fitting*

Port View



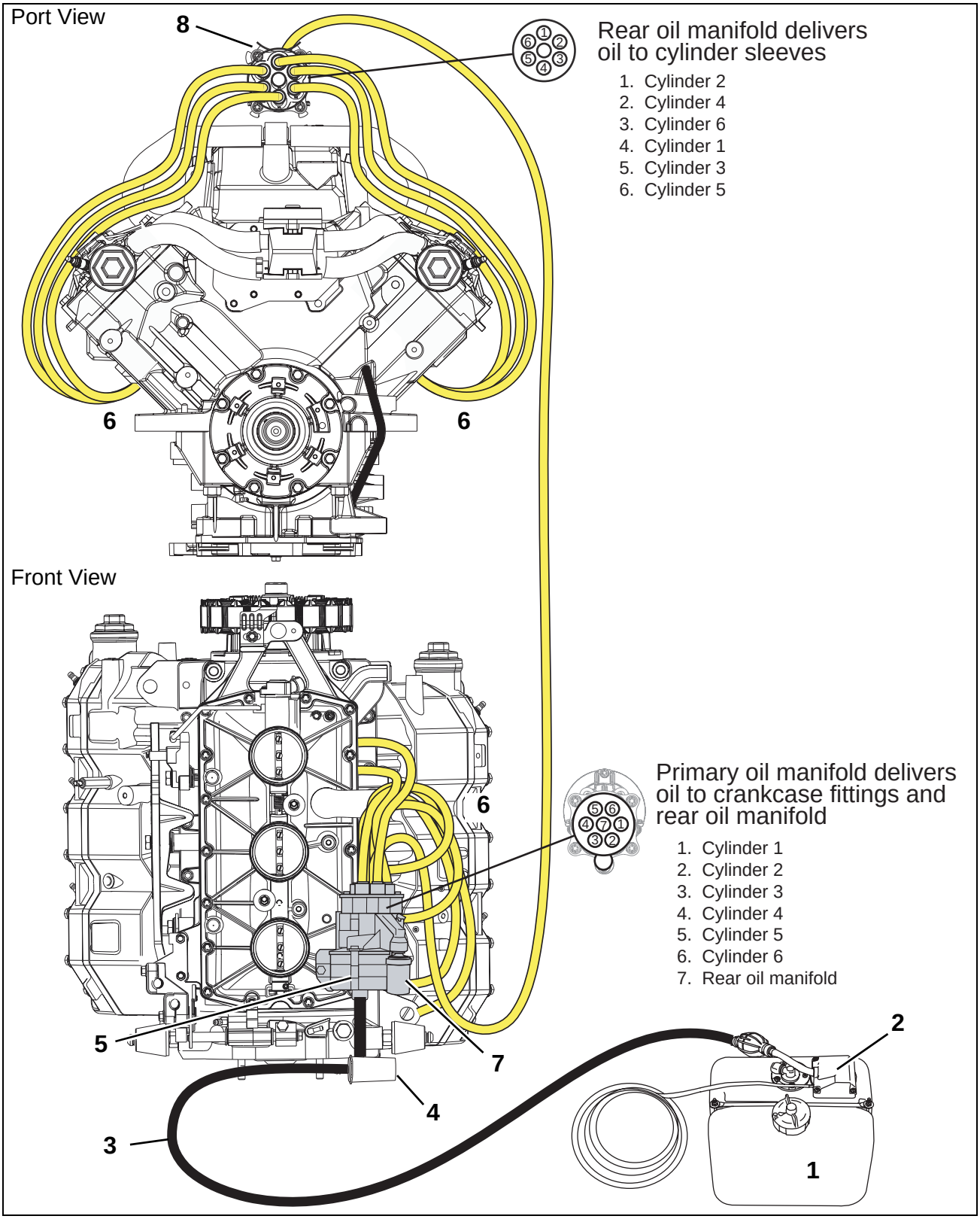
Starboard View



Oil Recirculation Hose Routing – Port and Starboard 008207

1. Recirculation fittings

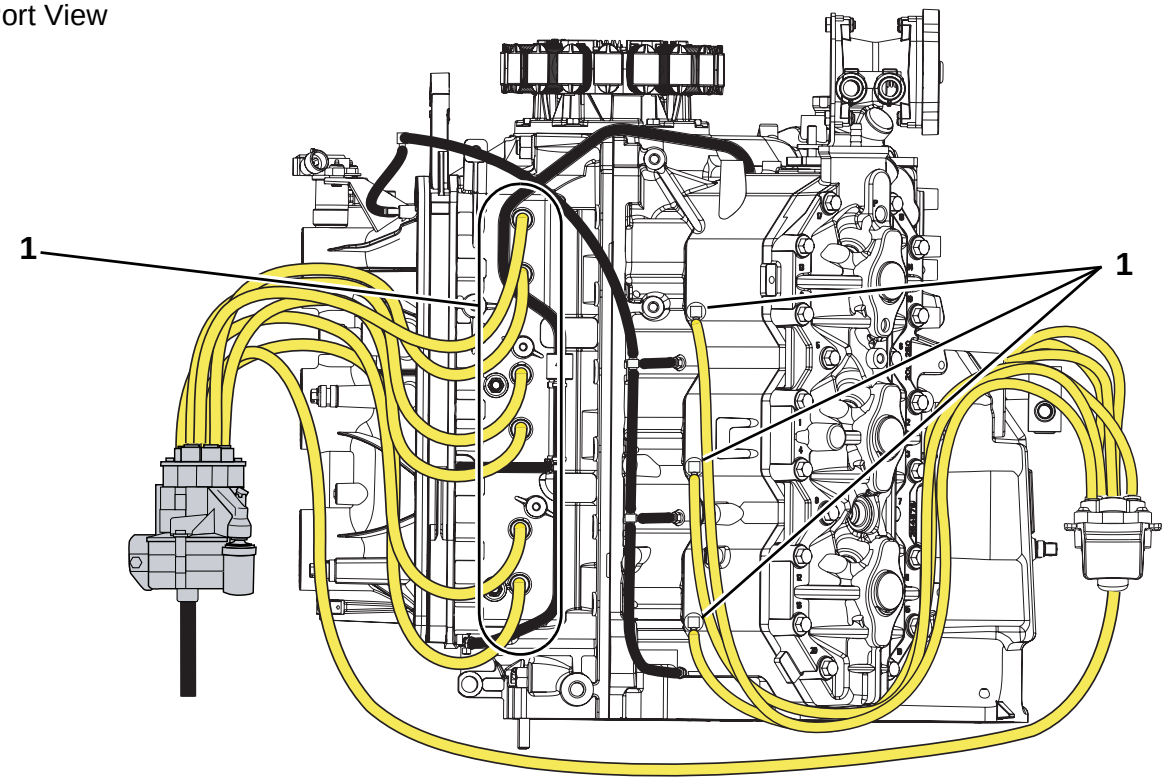
OIL SUPPLY HOSE ROUTINGS



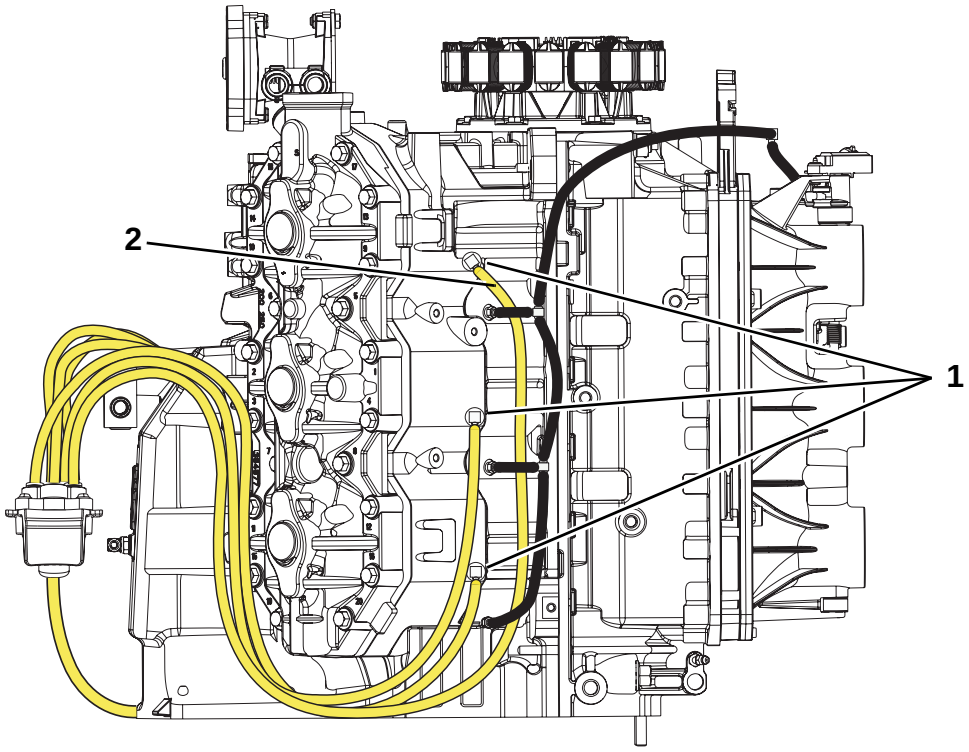
1. *Oil tank assembly*
2. *Oil pick up*
3. *Oil supply hose*
4. *Oil filter*
5. *Oil pump assembly*
6. *Oil distribution hoses*
7. *Oil pressure switch*
8. *Rear oil manifold*

008212

Port View



Starboard View



Oil Supply Hose Routing – Port and Starboard 008208

1. *Oil supply fittings*
2. *Oil distribution hose from rear oil manifold to cylinder #1, must be routed in front of oil recirculation fittings*